10/539063

Attorney Docket No.: 677/43982

JC17 Rec'd PCT/TTO 15 JUN 2005

SUBSTITUTE SPECIFICATION

BACKGROUND

[0001]

The present disclosure relates to a centrifuge, or a separator, comprising a centrifugal basket, or centrifugal drum, having a basket shell or drum shell, which is provided with solids discharge nozzles.

[0002]

A separator of this type is known from U.S. Patent Document US 3,108,952. In the exterior wall of the centrifugal basket of this separator, solids discharge nozzles are arranged in a mutually angularly offset manner in the area of the largest inside diameter of the centrifugal basket. In this case, nozzle bodies are inserted into bores of the basket shell, which nozzle bodies do not extend radially toward the outside but are oriented in an inclined manner with respect to the respective radial direction in order to utilize the acceleration effect of the product phase exiting from the nozzles, which reduces the power required for rotating the centrifugal basket.

[0003]

Since the discharge nozzles are arranged in an inclined manner with respect to the radial direction, the product jet exiting from the discharge nozzles can at least, by a certain portion, impact on the exterior wall of the basket or collide with it, which may cause considerable wear of the exterior wall of the basket.

[0004]

A similar state of the art is illustrated in U.S. Patent Document US 2,695,748. The discharge nozzles illustrated in this document each consist of a first sleeve with a bore extending centrically through the sleeve from the inside radially to the outside. The first sleeves are inserted into the bores of the basket shell. A second sleeve is in each case screwed into them in their end area at an angle with respect to the radial direction, which second sleeve also has a centric bore, so that the product phase exiting from the centrifugal basket is first guided through the first sleeve radially toward the outside and is then guided through the second sleeve from which the product phase exits in an inclined manner with respect to the radial direction against the rotating direction of the separator.

[0005]

From Figure 9 of U.S. Patent Document US 2,695,748 of the above-mentioned type, it is also known to insert the first sleeve at an angle with respect to the radial direction in a bore of the basket wall. In this case, at its outer end, the sleeve ends approximately flush with the exterior side of the centrifugal basket, which has the effect